REMARKS/ARGUMENTS

Claims 11-13, 16-17, 20-21, and new claims 37-48 are pending in this application. All the previously pending claims were rejected. Previously withdrawn claims 1-10 and 24-36 have been canceled; claims 11-13, 16-17, and and 20-21 have been amended, and new claims 37-48 have been added, to more particularly point out and distinctly claim the subject matter of the present invention. Applicant hereby requests further examination and reconsideration of the application in view of the foregoing amendments and these remarks.

On pages 2-3 of the Office Action, the Examiner objected to claims 11-13, 16, 17, 20, and 21 for use of the term "anti-reflection," since the drawings illustrate reflection. Applicant has amended the claims so that they refer to "periodic row reflection means for reducing specular reflection of light into the active region of each VCSEL" instead of to "anti-reflection means for..." Applicant submits that the term "anti-reflection" was used previously in the claims, and is employed in the Specification, to indicate that the means *reduce* (specular) *reflection* of light from the active region back into the active region. Since the means do this by specularly reflecting light *away from* the active region or by diffusely reflecting the light (see Specification, Fig. 6; page 10, lines 11-15),

The Examiner also objected to claims 13, 16, and 17 for specified informalities. Applicant has amended these claims to delete the reference to features and to employ the term "means," as required by the Examiner.

On page 3, the Examiner rejected claims 11, 13, 16, 17, and 20 under 35 U.S.C. § 103(a) as being unpatentable over Mukaihara et al. in view of Gaylord et al.

Independent claims 11 and 20 have been amended to specify that the back surface of the substrate has periodic row reflection means for reducing specular reflection of light into the active region of each VCSEL (see Specification, Fig. 6; page 9, line 24 to page 11, line 18). These period rows can have any suitable periodical and geometric cross-sections, such as triangular, sinusoidal, etc. (page 9, line 30 to page 10, line 2). These period rows receive specular light from the active region and reduce reflection of specular light back into the active region either (a) by *diffusely* reflecting light, or (b) by reflecting specular light but directed away from (i.e., not back into) the active region (see Specification, page 10, lines 11-15; new claims 40-41, 47-48).

Mukaihara et al. teaches diffuse reflection of light by having uneven shape of a bottom surface, but does not teach the use of periodic features, such as period reflection rows, nor of reducing specular reflection by specularly reflecting the light away from the active region. By contrast, Mukaihara et al.only theces diffuse reflection of light, and does not teach the use of periodic reflective rows to do this.

For the foregoing reasons, Applicant respectfully submits that independent claims 11 and 20, as amended, are neither anticipated, taught, nor suggested by the cited references, and are thus in condition for allowance, as are their pending dependent claims.

In view of the foregoing remarks and amendments, the pending claims, as variously amended, are believed to be in condition for allowance. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

The Assistant Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment which may be associated with this communication to our deposit account **50-1705**.

The undersigned may be contacted for any questions.

Respectfully submitted,

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